



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/567,776	02/09/2006	Takeshi Iwatsu	284534US6PCT	4018

22850 7590 04/01/2009
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER

MINCEY, JERMAINE A

ART UNIT	PAPER NUMBER
----------	--------------

2165

NOTIFICATION DATE	DELIVERY MODE
-------------------	---------------

04/01/2009

ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

Office Action Summary	Application No. 10/567,776	Applicant(s) IWATSU ET AL.	
	Examiner JERMAINE MINCEY	Art Unit 2165	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 02 January 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

This is a **Final** Office Action Correspondence in response to U.S. Application No. 10/567776 filed on 02/09/2006.

Examiner Acknowledgements

Examiner acknowledges that Fig. 14 was deleted from the examination. Examiner notes that Abstract was amended which removed the word "invention" and as a result the objection to Specification was removed. Examiner notes that amendments were made to claims 1-11, as a result 35 U.S.C. 112 rejections to claims 1, 7, and 10 and 35 U.S.C 103 rejections to claims 1-;11 and 35 U.S.C. 101 rejections to claims 7, 9, 10 and 11 were removed.

Response to Arguments

1. Applicant's arguments filed 01/02/2009 have been fully considered but they are not persuasive.

Art Unit: 2165

In light of the specification pg 1, Applicant describes the "communication terminal" to be a notebook personal computer or a PDA. So Examiner is taking the communication terminal to be any device with a processor and a storage memory.

Applicants arguments were directed to the amended limitation "database schema indication what types of information related to the content data an be stored in the database for each of the plurality of content data" which the Examiner concedes is not taught in the reference of Hayakawa, so another reference of Chen was introduced to meet this limitation.

Applicant's arguments with respect to claims 1-11 have been considered but are moot in view of the new ground(s) of rejection.

Priority

2. Acknowledgment is made of applicant's claim for foreign priority under 35 U.S.C. 119(a)-(d). The certified copy has been filed in parent PCT/JP2004/009891 filed on 07/06/2004

Information Disclosure Statement

The listing of references in the Search Report is not considered to be an information disclosure statement (IDS) complying with 37 CFR 1.98. 37 CFR 1.98(a)(2) requires a legible copy of: (1) each foreign patent; (2) each publication or that portion which caused it to be listed; (3) for each cited pending U.S. application, the application

Art Unit: 2165

specification including claims, and any drawing of the application, or that portion of the application which caused it to be listed including any claims directed to that portion, unless the cited pending U.S. application is stored in the Image File Wrapper (IFW) system; and (4) all other information, or that portion which caused it to be listed. In addition, each IDS must include a list of all patents, publications, applications, or other information submitted for consideration by the Office (see 37 CFR 1.98(a)(1) and (b)), and MPEP § 609.04(a), subsection I. states, "the list ... must be submitted on a separate paper." Therefore, the references cited in the Search Report have not been considered. Applicant is advised that the date of submission of any item of information or any missing element(s) will be the date of submission for purposes of determining compliance with the requirements based on the time of filing the IDS, including all "statement" requirements of 37 CFR 1.97(e). See MPEP § 609.05(a).

For each PCT listed in the IDS, Applicant must provide a corresponding Patent Application or Publication No. in order for the IDS references listed to be considered.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2165

4. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 1 and 6-12 are rejected under 35 U.S.C. 103(a) as being unpatentable by Hayakawa et al. U.S. Patent Application Publication No. 2003/0154187 (herein as 'Hayakawa') and further in view of Chen U.S. Patent Application Publication No. 2005/0177543 (herein as 'Chen').

Art Unit: 2165

As to claim 1 Hayakawa in combination with Chen teaches a method of updating a database schema for a database on a communication terminal which stores a plurality of content data, comprising:

Hayakawa teaches requesting that an update- information providing apparatus provide update-information “...” and update information about a database schema (Par. 0010 Hayakawa discloses information about a database needs to be updated. Wherein “requesting” is seen as initiating, wherein “database schema” is seen as information about a database and wherein “update-information” is seen as update file).

“...about a latest version of a program used for the content data on the communication terminal ...” (Par. 0010 and 0011 Hayakawa discloses initiating a notification that application data needs to be updated. Wherein “program to install” is seen as application data).

Hayakawa reference does not teach but Chen teaches corresponding to the latest version, the database schema indication what types of information related to the content data an be stored in the database for each of the plurality of content data. (Par. 0030 Chen discloses the XML schema containing the type of data that is located in the nodes. Wherein "content data" is seen as nodes).

It would have been obvious for a person of ordinary skill in the art at the time of the invention **was made** to combine Hayakawa’s disclosure with the limitation of having the schema information to contain data that relates to the type of data that can be stored with the data content.

A person of ordinary skill in the art at the time of the invention would have been motivated to make this combination in order to provide the system with the knowledge of knowing that type of data can be stored in the data content.

The combined teaching of Hayakawa and Chen reference further teaches the following:

receiving the update-information about the program and the update-information about the database schema, both transmitted from the update-information providing apparatus in response to the request (Par. 0010 Hayakawa discloses receiving a notification that application data needs and information about a database needs to be updated);

updating the program in accordance with the update-information about the program (Par. 0010 Hayakawa discloses updating the application data with the update file, wherein “update information” is seen as the update file);

comparing the database schema used by the updated program with the database schema already used by the communication terminal, in accordance with the update-information about the database schema, in terms of version (Par. 0011 Hayakawa discloses comparing the identification numbers of the application data with the database based upon the update file. Par. 0138 Hayakawa discloses updating information by writing over the previous versions based upon the update file);

updating the database schema used by the communication terminal, in accordance with the update-information about the database schema, when it is determined in the comparing step that the database schema mounted needs to be

Art Unit: 2165

updated (Par. 0010 Hayakawa discloses updating the database with the update file. Wherein “communication terminal” is seen as any computing device).

As to claim 6 Hayakawa in combination with Chen teaches each and every limitation of claim 1.

In addition Hayakawa teaches wherein in updating the database schema log information is recorded for each command issued to the database to update the database schema (Par. 0014 Hayakawa discloses a recording unit to log editing operation information, wherein “log information” is seen as the log that is produced from the recording unit).

As to claim 7 in Hayakawa combination with Chen teaches a communication terminal comprising:

Hayakawa teaches a processor (Par. 0063 Hayakawa discloses a central processing unit. Where “processor” is seen as central processing unit);

A memory for storing a database which stores a plurality of content data (Par. 0063 Hayakawa discloses a memory for storing);

requesting means requesting that an update- information providing apparatus provide update-information “...” and update information about a database schema (Par. 0010 Hayakawa discloses information about a database needs to be updated. Wherein “requesting” is seen as initiating, wherein “database schema” is seen as information about a database and wherein “update-information” is seen as update file).

Art Unit: 2165

“...about a latest version of a program used for the content data on the communication terminal...” (Par. 0010 and 0011 Hayakawa discloses initiating a notification that application data needs to be updated. Wherein “program to install” is seen as application data). Hayakawa reference does not teach but Chen teaches corresponding to the latest version, the database schema indication what types of information related to the content data can be stored in the database for each of the plurality of content data. (Par. 0030 Chen discloses the XML schema containing the type of data that is located in the nodes. Wherein “content data” is seen as nodes).

It would have been obvious for a person of ordinary skill in the art at the time of the invention **was made** to combine Hayakawa’s disclosure with the limitation of having the schema information to contain data that relates to the type of data that can be stored with the data content.

A person of ordinary skill in the art at the time of the invention would have been motivated to make this combination in order to provide the system with the knowledge of knowing that type of data can be stored in the data content.

The combined teaching of Hayakawa and Chen reference further teaches the following:

receiving means for receiving the update-information about the program and the update-information about the database schema, both transmitted from the update-information providing apparatus in response to the request (Par. 0010 Hayakawa discloses receiving a notification that application data needs and information about a database needs to be updated);

Art Unit: 2165

program-updating means for updating the program in accordance with the update-information about the program (Par. 0010 Hayakawa discloses updating the application data with the update file);

comparing means for comparing the database schema used by the program with the database schema already used by the communication terminal, in accordance with the update-information about the database schema, in terms of version (Par. 0011 Hayakawa discloses comparing the identification numbers of the application data with the database based upon the update file. Par. 0138 Hayakawa discloses updating information by writing over the previous versions based upon the update file);

database schema updating means for updating the database schema used by the communication terminal, in accordance with the update-information about the database schema, when the comparing means determines that the database schema mounted needs to be updated (Par. 0010 Hayakawa discloses updating the database with the update file).

As to claim 8 Hayakawa in combination with Chen teaches a method of providing update-information to a communication terminal which has a database storing a plurality of content data comprising:

Hayakawa teaches storing “...” communication terminal and update-information for a database schema (Par. 0004 and Par. 0011 Hayakawa discloses storing update information. Wherein “update-information for a program” and “update-information for a database” is seen as information).

Art Unit: 2165

“... update-information for a latest version of a program used for the content data on the ...” (Par. 0010 and 0011 Hayakawa discloses initiating a notification that application data needs to be updated. Wherein “program to install” is seen as application data).

Hayakawa reference does not teach but Chen teaches corresponding to the latest version, the database schema indication what types of information related to the content data an be stored in the database for each of the plurality of content data. (Par. 0030 Chen discloses the XML schema containing the type of data that is located in the nodes. Wherein "content data" is seen as nodes).

It would have been obvious for a person of ordinary skill in the art at the time of the invention **was made** to combine Hayakawa's disclosure with the limitation of having the schema information to contain data that relates to the type of data that can be stored with the data content.

A person of ordinary skill in the art at the time of the invention would have been motivated to make this combination in order to provide the system with the knowledge of knowing that type of data can be stored in the data content.

The combined teaching of Hayakawa and Chen reference further teaches the following:

transmitting the update-information for the program and the update-information for the database schema to the communication terminal when the communication terminal requests the update-information for the program and the update-information for

Art Unit: 2165

the database schema (Par. 0010 Hayakawa discloses transmitting the update information when an update is initiated);

wherein the program is updated in the communication terminal in accordance with the update-information for the program (Par. 0010 Hayakawa discloses updating the application data with the update file);

the database schema used by the program and the database schema already used by the communication terminal are compared in terms of version in accordance with the update-information for the database schema (Par. 0011 Hayakawa discloses comparing the identification numbers of the application data with the database based upon the update file. Par. 0138 Hayakawa discloses updating information by writing over the previous versions based upon the update file);

and the database schema used by the communication terminal is updated in accordance with the update-information about the database schema, when it is determined from the result of comparison that the database schema needs to be updated (Par. 0010 Hayakawa discloses updating the database with the update file).

As to claim 9 Hayakawa in combination with Chen teaches an update-information providing apparatus which provides update-information to a communication terminal which has a database storing a plurality of content data, the update-information providing apparatus comprising:

A processor: (Par. 0063 Hayakawa discloses a central processing unit. Where “processor” is seen as central processing unit);

Art Unit: 2165

storing means for storing “...” in a communication terminal and update-information for a database schema (Par. 0004 and Par. 0011 Hayakawa discloses storing update information. Wherein “update-information for a program” and “update-information for a database” is seen as information).

“...update-information for a latest version of a program used for the content data on the...” (Par. 0010 and 0011 Hayakawa discloses initiating a notification that application data needs to be updated. Wherein “program to install” is seen as application data).

Hayakawa reference does not teach but Chen teaches corresponding to the latest version, the database schema indication what types of information related to the content data can be stored in the database for each of the plurality of content data. (Par. 0030 Chen discloses the XML schema containing the type of data that is located in the nodes. Wherein “content data” is seen as nodes).

It would have been obvious for a person of ordinary skill in the art at the time of the invention **was made** to combine Hayakawa’s disclosure with the limitation of having the schema information to contain data that relates to the type of data that can be stored with the data content.

A person of ordinary skill in the art at the time of the invention would have been motivated to make this combination in order to provide the system with the knowledge of knowing that type of data can be stored in the data content.

The combined teaching of Hayakawa and Chen reference further teaches the following:

transmitting means for transmitting the update-information for the program and the update-information for the database schema to the communication terminal when the communication terminal requests the update-information for the program and the update-information for the database schema (Par. 0010 Hayakawa discloses transmitting the update information when an update is initiated);

wherein the program is updated in accordance in the communication terminal with the update-information for the program (Par. 0010 Hayakawa discloses updating the application data with the update file);

the database schema used by the program and the database schema already used by the communication terminal are compared in terms of version in accordance with the update-information for the database schema (Par. 0011 Hayakawa discloses comparing the identification numbers of the application data with the database based upon the update file. Par. 0138 Hayakawa discloses updating information by writing over the previous versions based upon the update file);

the database schema used by the communication terminal is updated in accordance with the update-information about the database schema, when it is determined from the result of comparison that the database schema needs to be updated (Par. 0010 Hayakawa discloses updating the database with the update file).

As to claim 10 Hayakawa in combination with Chen teaches a computer readable storage medium encoded with computer executable instructions, which when executed by a computer, cause a communication terminal, which includes a database storing a

Art Unit: 2165

plurality of content data, to perform a method for updating a database schema comprising:

Hayakawa teaches requesting that an update- information providing apparatus should provide update-information “...” and update information about a database schema (Par. 0010 Hayakawa discloses information about a database needs to be updated. Wherein “requesting” is seen as initiating, wherein “database schema” is seen as information about a database and wherein “update-information” is seen as update file);

“...about a latest version of a program used for the content data on the communication terminal...” (Par. 0010 and 0011 Hayakawa discloses initiating a notification that application data needs to be updated. Wherein “program to install” is seen as application data).

Hayakawa reference does not teach but Chen teaches corresponding to the latest version, the database schema indication what types of information related to the content data an be stored in the database for each of the plurality of content data. (Par. 0030 Chen discloses the XML schema containing the type of data that is located in the nodes. Wherein "content data" is seen as nodes).

It would have been obvious for a person of ordinary skill in the art at the time of the invention **was made** to combine Hayakawa’s disclosure with the limitation of having the schema information to contain data that relates to the type of data that can be stored with the data content.

Art Unit: 2165

A person of ordinary skill in the art at the time of the invention would have been motivated to make this combination in order to provide the system with the knowledge of knowing that type of data can be stored in the data content.

The combined teaching of Hayakawa and Chen reference further teaches the following:

receiving the update-information about the program and the update-information about the database schema, both transmitted from the update-information providing apparatus in response to the request (Par. 0010 Hayakawa discloses receiving a notification that application data needs and information about a database needs to be updated);

updating the program in accordance with the update-information about the program (Par. 0010 Hayakawa discloses updating the application data with the update file);

comparing the database schema used by the program with the database schema mounted, in accordance with the update-information about the database schema, already used by the communication terminal in terms of version (Par. 0011 Hayakawa discloses comparing the identification numbers of the application data with the database based upon the update file. Par. 0138 Hayakawa discloses updating information by writing over the previous versions based upon the update file);

updating the database schema used by the communication terminal, in accordance with the updated-information about the database schema, when it is determined in the comparing step that the database schema needs to be updated (Par.

Art Unit: 2165

0010 Hayakawa discloses updating the database with the update file).

As to claim 11 Hayakawa in combination with Chen teaches a computer readable storage medium encoded with computer executable instructions, which was executed by a computer, cause an update-information providing apparatus to perform a method for providing update information to a communication terminal which as a database storing a plurality of content data, the method comprising:

Hayakawa teaches storing ... communication terminal and update-information for a database schema (Par. 0004 and Par. 0011 Hayakawa discloses storing update information. Wherein “update-information for a program” and “update-information for a database” is seen as information).

“... update-information for a latest version of a program used for the content data on the...” (Par. 0010 and 0011 Hayakawa discloses initiating a notification that application data needs to be updated. Wherein “program to install” is seen as application data).

Hayakawa reference does not teach but Chen teaches corresponding to the latest version, the database schema indication what types of information related to the content data an be stored in the database for each of the plurality of content data. (Par. 0030 Chen discloses the XML schema containing the type of data that is located in the nodes. Wherein "content data" is seen as nodes).

It would have been obvious for a person of ordinary skill in the art at the time of the invention **was made** to combine Hayakawa’s disclosure with the limitation of having

Art Unit: 2165

the schema information to contain data that relates to the type of data that can be stored with the data content.

A person of ordinary skill in the art at the time of the invention would have been motivated to make this combination in order to provide the system with the knowledge of knowing that type of data can be stored in the data content.

The combined teaching of Hayakawa and Chen reference further teaches the following:

transmitting the update-information for the program and the update-information for the database schema to the communication terminal when the communication terminal requests the update-information for the program and the update-information for the database schema (Par. 0010 Hayakawa discloses transmitting the update information when an update is initiated);

wherein the program is updated in the communication terminal in accordance with the update-information for the program (Par. 0010 Hayakawa discloses updating the application data with the update file);

the database schema used by the program and the database schema already used by the communication terminal are compared in terms of version in accordance with the update-information for the database schema (Par. 0011 Hayakawa discloses comparing the identification numbers of the application data with the database based upon the update file. Par. 0138 Hayakawa discloses updating information by writing over the previous versions based upon the update file); and

Art Unit: 2165

and the database schema used by the communication terminal is updated in accordance with the update- information about the database schema, when it is determined from the result of comparison that the database schema needs to be updated (Par. 0010 Hayakawa discloses updating the database with the update file).

As to claim 12 Hayakawa in combination with Chen teaches a communication terminal comprising:

Hayakawa teaches a processor (Par. 0063 Hayakawa discloses a central processing unit. Where “processor” is seen as central processing unit);

a memory for storing a database which stores a plurality of content data (Par. 0063 Hayakawa discloses a memory for storing);

requesting unit configured to request that an update-information providing apparatus provide update-information “...” and update information about a database schema (Par. 0010 Hayakawa discloses information about a database needs to be updated. Wherein “requesting” is seen as initiating, wherein “database schema” is seen as information about a database and wherein “update-information” is seen as update file);

“...about a latest version of a program used for the content data on the communication terminal...” (Par. 0010 and 0011 Hayakawa discloses initiating a notification that application data needs to be updated. Wherein “program to install” is seen as application data);

Art Unit: 2165

Hayakawa reference does not teach but Chen teaches corresponding to the latest version, the database schema indication what types of information related to the content data can be stored in the database for each of the plurality of content data. (Par. 0030 Chen discloses the XML schema containing the type of data that is located in the nodes. Wherein "content data" is seen as nodes).

It would have been obvious for a person of ordinary skill in the art at the time of the invention **was made** to combine Hayakawa's disclosure with the limitation of having the schema information to contain data that relates to the type of data that can be stored with the data content.

A person of ordinary skill in the art at the time of the invention would have been motivated to make this combination in order to provide the system with the knowledge of knowing that type of data can be stored in the data content.

The combined teaching of Hayakawa and Chen reference further teaches the following:

a receiving unit configured to receive the update-information about the program and the update-information about the database schema, both transmitted from the update- information providing apparatus in response to the request (Par. 0010 Hayakawa discloses receiving a notification that application data needs and information about a database needs to be updated);

a program-updating unit configured to update the program in accordance with the update-information about the program (Par. 0010 Hayakawa discloses updating the

Art Unit: 2165

application data with the update file, wherein “update information” is seen as the update file);

a comparing unit configured to compare the database schema used by the updated program with the database schema already used by the communication terminal, in accordance with the update-information about the database schema, in terms of version (Par. 0011 Hayakawa discloses comparing the identification numbers of the application data with the database based upon the update file. Par. 0138 Hayakawa discloses updating information by writing over the previous versions based upon the update file); and

a database schema updating unit configured to update the database schema used by the communication terminal, in accordance with the update-information about the database schema, when the comparing unit determines that the database schema needs to be updated (Par. 0010 Hayakawa discloses updating the database with the update file. Wherein “communication terminal” is seen as any computing device).

7. Claims 2 and 3 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayakawa in combination with Chen as applied to claim 1 above, and further in view of Anderson U.S. Patent No. 6,298,401 (herein as ‘Anderson’).

Art Unit: 2165

As to claim 2 Hayakawa in combination with Chen teaches each and every limitation of claim 1.

Hayakawa in combination with Chen does not teach but Anderson teaches wherein in updating the database schema, accesses to the database from the program are inhibited while the database schema is being updated (Col. 16 Line 6-9 Anderson discloses prohibiting access while the database is being updated).

It would have been obvious for a person of ordinary skill in the art at the time of the invention to combine the teaching of Hayakawa and Chen reference with the limitation of prohibiting access while the database is updating.

One would have been motivated to make this combination in order to prevent a user from accessing the database during an update operation that way to keep the data coherent, e.g., which would prevent erroneous data access.

As to claim 3 Hayakawa in combination with Chen and Anderson teaches each and every limitation of claim 2.

In addition Anderson teaches wherein in updating the database schema, accesses to the database from any application in the program is inhibited while the database schema is being updated (Col. 16 Line 6-9 Anderson discloses prohibiting access while the data is being updated).

Art Unit: 2165

8. Claims 4 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hayakawa in combination with Chen as applied to claim 1 above, and further in view of Gautam et al U.S. Patent No. 5,956,704 (herein as 'Gautam').

As to claim 4 Hayakawa in combination with Chen teaches each and every limitation of claim 1.

Hayakawa in combination with Chen does not teach but Gautam teaches wherein in updating the database schema, the database schema is inhibited from being updated while the program is accessing the database (Col. 4 Line 60-65 Gautam discloses locking the database from any write commands while being accessed).

It would have been obvious for a person of ordinary skill in the art at the time of the invention to combine the teaching of the Hayakawa and Chen reference with the limitation of prohibiting access while the database is updating.

One would have been motivated to make this combination in order to prevent an update while the database is being accessed. One would be motivated to prevent updating a database while it is being accessed so that when the system does do an update the information is current and not out dated because the database was accessed while the database was being updated.

As to claim 5 Hayakawa in combination with Chen and Gautam teaches each and every limitation of claim 4.

In addition Gautam teaches wherein in updating the database schema, the database schema is inhibited from being updated while any application in the program is accessing the database (Col. 4 Line 60-65 Gautam discloses locking the database from any write commands while being accessed. Wherein "inhibited" is seen as locking the data from any write commands).

9. **Conclusion**

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Art Unit: 2165

Any inquiry concerning this communication or earlier communications from the examiner should be directed to JERMAINE MINCEY whose telephone number is (571)270-5010. The examiner can normally be reached on Monday through Thursday 8:30-5pm EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christian Chace can be reached on 1-571-272-4190. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Kuen S Lu/
Primary Examiner, Art Unit 2169

/J. M./
Examiner, Art Unit 2165